

IN THE CLAIMS:

Please cancel claims 1-19, without prejudice, and add new claims 20-38 as follows.

Claims 1 – 19 (Cancelled)

20. (New) A method of carrying an application level message encapsulated inside a signaling message of an access network, said method comprising the steps of: receiving an application level message from a sender application process to an access network signaling process;

adapting said application level message and encapsulating it in a signaling message of an access network; and

delivering said encapsulated application level message to a receiver application process by transmitting said signaling message, wherein said encapsulated application level message is transparent to the means of said access network transmitting said signaling message, and

wherein said application level message includes an indication under which conditions the signaling message should be delivered.

21. (New) A method according to claim 20, wherein said sender application process is performed in a mobile terminal being attached to said access network.

22. (New) A method according to claim 20, wherein said sender application process is performed in a server providing a corresponding application.

23. (New) A method according to claim 20, wherein said indication comprises an address of the application receiver process being one of the group comprising a logical name, an IP address, and a port number.

24. (New) A method according to claim 20, wherein said indication comprises

another indication whether said signaling message should be delivered even if the Quality-of-Service changes.

25. (New) A method according to claim 20, wherein said method is implemented in a call establishment procedure for Voice over the Internet Protocol.

26. (New) A method according to claim 20, wherein said encapsulated application level message is included in an activation request within a Packet Data Protocol context signaling.

27. (New) A method according to claim 22, wherein said application server is one of the group of proxy call state control function means, push proxy server means, and instant message server means.

28. (New) A method according to claim 26, wherein said packet data protocol context signaling is embedded into one of the group of a Session Initiation Protocol signaling, a Resource Reservation Protocol signaling, and a Point to Point Protocol signaling.

29. (New) A method according to claim 26, wherein said encapsulated application level message includes a complete Session Initiation Protocol message.

30. (New) A method according to claim 29, wherein a Gateway GPRS Support Node (GGSN) creates a Internet Protocol/User Datagram Protocol header and forwards said complete Session Initiation Protocol message to a Session Initiation Protocol proxy means.

31. (New) A method according to claim 30, wherein said header is created by using information sent in an optional application level message information element.

32. (New) A method according to claim 30, wherein said header is created by using information coming from said Packet Data Protocol context signaling.

33. (New) A method according to claim 30, wherein said header is created by

using information coming from a configuration process.

34. (New) A method according to claim 26, wherein
said encapsulated application level message indicates that a Gateway GPRS
Support Node shall send a context response message only when a response of said
receiver application process is received, as a reaction to which said Gateway GPRS
Support Node starts a timer to wait for answer; and wherein

a reply before the expiry of said timer is copied as a new encapsulated application
level message in said context response message, and in case of no reply before the expiry
of said timer an indication that said receiver application process does not answer is
copied as a new encapsulated application level message in said context response
message.

35. (New) A method according to claim 26, wherein
said encapsulated application level message indicates that a Gateway GPRS
Support Node shall send a context response message immediately, as a reaction to which
said Gateway GPRS Support Node sends a context response message immediately,
whereas a response of said receiver application process is returned to said sender
application process in a non-encapsulated manner as normal traffic.

36. (New) A system adapted to perform a transmission of an application level
message encapsulated inside a signaling message of an access network, comprising:
receiving means adapted to receive an application level message from a sender
application process to an access network signaling process;
adapting means for encapsulating said application level message in a signaling
message of an access network; and
delivering means adapted to deliver said encapsulated application level message to
a receiver application processing means, and
wherein said application level message includes an indication under which
conditions the signaling message should be delivered.

37. (New) A system according to claim 36, further comprising a server adapted
to perform said sender application process.

38. (New) A system according to claim 37, wherein said server is one of the group of proxy call state control function means, push proxy server means, and instant message server means.